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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/756,493	01/08/2001	Hirotoshi Takemori	70551/55523	4293

21874 7590 07/13/2004

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EXAMINER	
ORTIZ CRIADO, JORGE L	
ART UNIT	**PAPER NUMBER**
2655	16

DATE MAILED: 07/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/756,493	TAKEMORI ET AL.	
	Examiner	Art Unit	
	Jorge L Ortiz-Criado	2655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 April 2003*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 3-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 3-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *10/04, 3/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1 and 3-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kay et al. U.S. Patent No. 5,544,143 in combination with Nakao et al. U.S. patent No. 6,272,097 and further in view of Mori et al. U.S. Patent No. 4,400,062.

Regarding claim 1, Kay et al. discloses an integrated unit (See col. 4, lines 35-37; Fig. 1, ref # 30), comprising:

a laser beam source for emitting a laser beam (See col. 4, lines 45-47; Fig. 1, ref. # 40);

a detecting portion for detecting reflection of said emitted laser beam(See col. 6, lines 13-14; Fig. 1, ref. # 68);

optical elements for controlling the pathways defined by said emitted laser beam and said reflection thereof (See col. 4, lines 25-28; Fig. 1) ,

said optical elements including at least a diffraction element for diffracting said emitted laser beam and said reflection thereof (See col. 4, lines 47-50; Fig. 1, ref. # 42)

and a casing accommodating said laser beam source and said detecting portion (See col. 4, lines 35-37; Fig. 1, ref. # 30,32),and

a transparent optical compensation film being formed integrally with one of said optical elements or with an end of said casing so as to be disposed in said optical pathways defined by said emitted laser beam and said reflection thereof (See col. 4, lines 33 to col. 5, lines 1-35; Fig. # 1, ref. # 34).

Kay et al. further teaches wherein the light could have other circular or other polarizations by another optical compensation element included in the pathways of the optical elements (See col. 4, line 61 to col. 5, line2).

But Kay et al. does not expressly disclose the transparent optical compensation film to circularizing the polarization of light passing therethrough such that light exiting therefrom is circularly or elliptically polarized.

However, this feature is well known in the art as evidenced by Nakao et al., which discloses an integrated unit having an optical compensation film formed integrally with other optical elements (See col. 4, lines 14-17; Fig. 1, ref# 7) for circularizing the polarization of light passing therethrough such that light exiting therefrom is circularly polarized (See col. 4, lines 44-47)

Therefore it would have been obvious to one with ordinary skill in the art at the time of the invention to integrally include the compensation film to circularizing the polarization of light passing therethrough in order to obtain a small integrated unit by a simple manufacturing process, as suggested by Nakao et al.

But Kay et al. in combination with Nakao et al. does not expressly disclose that the compensation film comprises a uniaxially-stretched or biaxially-stretched polyolefin-type polymer film.

However, this feature is well know in the art as evidenced by Mori et al., which discloses compensation element included in the pathways of the optical elements of an optical pickup comprising a compensation film of a serving a uniaxially-stretched or biaxially-stretched polyolefin-type polymer film function of changing polarization state of the laser beam (See col. 1, line 10 to col. 2, line 51; col. 3, line 42 to col. 4, line 43).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to include a compensation film of high polymer film in order to effectively obtain the function of changing polarization state of the laser beam entering to the optical storage medium which can be easily, inexpensively mass produced and also can be easily integrally formed and stackable, as suggested by Mori et al.

Regarding claim 3, the combination of Kay et al. with Nakao et al. and Mori et al., would show wherein said optical compensation film is attached onto said diffraction element (See Kay et al., Fig. 1, ref # 34,42)

Regarding claim 4, the combination of Kay et al. with Nakao et al. and Mori et al. would show including said optical compensation film inside of said diffraction element (See Kay et al., col. 5, lines 15-19).

Regarding claim 5, the combination of Kay et al. with Nakao et al. and Mori et al. would show wherein said casing and said optical compensation film are integrated (See Kay et al., Fig. 1, ref # 30,32,34).

Regarding claim 6, the combination of Kay et al. with Nakao et al. would and Mori et al. would show including a cap member, provided to said casing, for closing an opening (See Kay et al., Fig. 1, ref. # 65).

Regarding claim 7, the combination of Kay et al. with Nakao et al. and Mori et al. would show wherein said cap member and an optical compensation film are integrated (See Kay et al., Fig. 1, ref. # 34,65).

Regarding claim 8, the combination of Kay et al. with Nakao et al. and Mori et al. would show wherein said diffraction element has a diffraction pattern for diffracting a laser beam, said diffraction pattern being formed on said optical compensation film (See Kay et al., col. 5, lines 3-22).

Regarding claim 9, the combination of Kay et al. with Nakao et al. and Mori et al. would show wherein said diffraction element has a diffraction pattern for diffracting a laser beam, said optical compensation film being formed on said diffraction pattern (See Kay et al., col. 5, lines 3-22).

Regarding claim 10, Kay et al. discloses an optical pickup for reading information recorded on an optical disk by condensing a laser beam onto the optical disk (See col. 1, lines 24-30; col. 4, lines 33-47), comprising):

a laser beam source for emitting a laser beam (See col. 4, lines 45-47; Fig. 1, ref. # 40);

a detecting portion for detecting a reflection of said emitted laser beam (See col. 6, lines 13-14; Fig. 1, ref. # 68);

optical elements for controlling the pathways defined by said emitted laser beam and said reflection thereof (See col. 4, lines 25-28; Fig. 1),

said optical elements including at least a diffraction element for diffracting said emitted laser beam and said reflection thereof (See col. 4, lines 47-50; Fig. 1, ref. # 42);

a casing accommodating said laser beam source and said detecting portion (See col. 4, lines 35-37; Fig. 1, ref. # 30,32),

and integrated unit in which said diffraction element and said casing are integrated (See col. 4, lines 33-47 to col. 5, lines 1-35; Fig. # 1, ref. # 30,32,42)

an objective lens for condensing the laser beam onto the optical disk (See Fig. 1, ref. # 52),

a transparent optical compensation film being formed integrally with one of said elements or with an end of said casing so as to be disposed in said optical pathways defined by said emitted laser beam and said reflection thereof (See col. 4, lines 33 to col. 5, lines 1-35; Fig. # 1, ref. # 34).

Kay et al. further teaches wherein the light could have other circular or other polarizations by another optical compensation element included in the pathways of the optical elements (See col. 4, line 61 to col. 5, line2).

But Kay et al. does not expressly disclose the transparent optical compensation film to circularizing the polarization of light passing therethrough such that light exiting therefrom is circularly or elliptically polarized.

However, this feature is well known in the art as evidenced by Nakao et al., which discloses an integrated unit having an optical compensation film formed integrally with other optical elements (See col. 4, lines 14-17; Fig. 1, ref# 7) for circularizing the polarization of light passing therethrough such that light exiting therefrom is circularly polarized (See col. 4, lines 44-47)

Therefore it would have been obvious to one with ordinary skill in the art at the time of the invention to integrally include the compensation film to circularizing the polarization of light passing therethrough in order to obtain a small integrated unit by a simple manufacturing process, as suggested by Nakao et al.

But Kay et al. in combination with Nakao et al. does not expressly disclose that the compensation film comprises a uniaxially-stretched or biaxially-stretched polyolefin-type polymer film.

However, this feature is well know in the art as evidenced by Mori et al., which discloses compensation element included in the pathways of the optical elements of an optical pickup comprising a compensation film of a serving a uniaxially-stretched or biaxially-stretched

polyolefin-type polymer film function of changing polarization state of the laser beam (See col. 1, line 10 to col. 2, line 51; col. 3, line 42 to col. 4, line 43).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to include a compensation film of high polymer film in order to effectively obtain the function of changing polarization state of the laser beam entering to the optical storage medium which can be easily, inexpensively mass produced and also can be easily integrally formed and stackable, as suggested by Mori et al.

Regarding claim 11, Kay et al. discloses an optical pickup for reading information recorded on an optical disk by condensing a laser beam onto the optical disk (See col. 4, lines 33-35; Fig. 1), comprising:

a laser beam source for emitting a laser beam (See col. 4, lines 45-47; Fig. 1, ref. # 40);

a detecting portion for detecting a reflected light (See col. 6, lines 13-14; Fig. 1, ref. # 68);

a diffraction element for diffracting the laser beam (See col. 4, lines 47-50; Fig. 1, ref. # 42);

a casing accommodating said laser beam source and said detecting portion (See col. 4, lines 35-37; Fig. 1, ref. # 30,32);

an integrated unit in which said diffraction element and said casing are integrated (See col. 4, lines 33 to col. 5, lines 1-35; Fig. 1, ref # 30,32,42);

an objective lens for condensing the laser beam onto the optical disk (See Fig. 1, ref. # 52);

and a reflection mirror for changing a direction of the laser beam,

wherein said reflection mirror is integrated with a transparent optical compensation film a (See col. 6, lines 18-24; Fig. 1, ref. # 34,64).

Kay et al. further teaches wherein the light could have other circular or other polarizations by another optical compensation element included in the pathways of the optical elements (See col. 4, line 61 to col. 5, line2).

But Kay et al. does not expressly disclose the transparent optical compensation film to circularizing the polarization of light passing therethrough such that light exiting therefrom is circularly or elliptically polarized.

However, this feature is well known in the art as evidenced by Nakao et al., which discloses an integrated unit having an optical compensation film formed integrally with other optical elements (See col. 4, lines 14-17; Fig. 1, ref# 7) for circularizing the polarization of light passing therethrough such that light exiting therefrom is circularly polarized (See col. 4, lines 44-47)

Therefore it would have been obvious to one with ordinary skill in the art at the time of the invention to integrally include the compensation film to circularizing the polarization of light passing therethrough in order to obtain a small integrated unit by a simple manufacturing process, as suggested by Nakao et al.

But Kay et al. in combination with Nakao et al. does not expressly disclose that the compensation film comprises a uniaxially-stretched or biaxially-stretched polyolefin-type polymer film.

However, this feature is well know in the art as evidenced by Mori et al., which discloses compensation element included in the pathways of the optical elements of an optical pickup comprising a compensation film of a serving a uniaxially-stretched or biaxially-stretched polyolefin-type polymer film function of changing polarization state of the laser beam (See col. 1, line 10 to col. 2, line 51; col. 3, line 42 to col. 4, line 43).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to include a compensation film of high polymer film in order to effectively obtain the function of changing polarization state of the laser beam entering to the optical storage medium which can be easily, inexpensively mass produced and also can be easily integrally formed and stackable, as suggested by Mori et al.

Response to Arguments

3. Applicant's arguments with respect to claims 1 and 3-11 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jorge L Ortiz-Criado whose telephone number is (703) 305-8323. The examiner can normally be reached on Mon.-Thu.(8:30 am - 6:00 pm),Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris H To can be reached on (703) 305-4827. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

joc

W.R. YOUNG
PRIMARY EXAMINER